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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,661	05/17/2001	Stuart A. Fraser	96-1007RE	3933
63710 7590 12/14/2009 INNOVATION DIVISION CANTOR FITZGERALD, L.P. 110 EAST 59TH STREET (6TH FLOOR) NEW YORK, NY 10022			EXAMINER CHAMPAGNE, DONALD	
			ART UNIT 3688	PAPER NUMBER
			MAIL DATE 12/14/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/859,661

**Applicant(s)**

FRASER ET AL.

**Examiner**

Donald L. Champagne

**Art Unit**

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-23 and 34-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-23 and 34-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114 was filed in this application on 9 February 2009 after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submissions filed on 9 February 2009 and 6 July 2009 have been entered.

### ***Application Status***

2. The pending claims are as given in applicant's filing of 6 July 2009. The original specification, as originally issued (US005905974A) has been amended twice, in filings of 17 May 2001 and 9 September 2002.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention does not clearly fall within at least one of the four statutory categories of invention enumerated by 35 U.S.C. § 101 (MPEP § 2106.IV). (The Office recognizes "system" as a synonym for the statutory term "machine".) See para. 4-5 below.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

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regards as the invention. In order to be statutory, each claim must clearly indicate to which of the four statutory classes it belongs. It is not sufficient that the claims which depend from claim 1 imply that claim 1 is a "system" claim.

7. Claim 1-5,7-23 and 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Where applicant acts as his or her own **lexicographer** to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "a protocol of trade sequences" in claim 1 (line 12) is used by the claim to mean "a series or set(s) of trade sequences" while the accepted meaning of "protocol" is (in the context of Computer Science), "rules determining the format and transmission of data" (Google definitions of "protocol"). The term is indefinite because the specification does not clearly redefine the term.<sup>1</sup> This rejection can be overcome by claiming a "trade sequence(s)" in place of "a protocol of trade sequences".

***Claim Rejections - 35 USC § 102 and 35 USC § 103***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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<sup>1</sup> MPEP § 2111. An inventor may define specific terms used to describe invention, but must do so "with reasonable clarity, deliberateness, and precision" (MPEP § 2111.01.III). A "clear definition" must establish the metes and bounds of the terms. A clear definition must unambiguously establish what is and what is not included. A clear definition is indicated by a section labeled definitions, or by the use of phrases such as "by xxx we mean"; "xxx is defined

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-5, 7-23, and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by McCausland et al. (US005243331A, hereafter "McCausland") and also under 35 U.S.C. 102(b) as being anticipated by Kramer (US patent 5,038,284).
11. In order to provide a more concise action, the examiner will cite features of the claim followed by citation of the appropriate passages from each of the two references. However, the applicant is cautioned that each reference is being used in a separate and distinct rejection under 35 U.S.C. 102(b).
12. McCausland and Kramer each teach (independent claim 1) a trading system<sup>2</sup>, comprising:
- a plurality of workstations comprising a display means (McCausland, Figure 2; Kramer, Figure 3a and col 11, lines 9-12); and
  - a server in communication with said workstations, programmed to support a predetermined trading control logic wherein said trading control logic comprises (a protocol of) trade sequences initiated from a bid/offer state by a participant hit or lift trade command (McCausland, Figure 1, col 22, lines 43-63, and col 24, lines 7-67; Kramer col 5, lines 23-31 and col 9, lines 42-65).
13. Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure (MPEP § 2111.04). Accordingly, no patentable weight was given to the following claim language:

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as"; or "xxx includes, ... but does not include ...". An example does not constitute a "clear definition" beyond the scope of the example.

<sup>2</sup> From the dependent claims, the examiner assumes the applicant is claiming a "trading system". No patentable weight is given to the preamble of claim 1 because the examiner finds neither logic nor patentable meaning in it. The applicant is apparently trying to claim a "system", yet most of the preamble text appears to describe an intended use. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

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"for presenting to a participant information about pending market conditions as they relate to said items being traded and the bids and offers entered by other participants in regard to said items";

"wherein said protocol is directed to execute trade commands from said participants in a predefined way corresponding to a plurality of trade states defining the ability of various participants to participate in trading activity"; and

"wherein said trade states comprise a state whereby the trading control logic, in response to detecting that an aggressor participant's hit or lift of an order and that the order was changed from a first size to a second size that is greater than the first size within a predefined period of time of the hit or lift command, automatically enables the aggressor participant to decline, prior to execution, at least a portion of only the excess above the first size."

14. A "state" or "trade/ing state" is a condition and not structure *per se* (Merriam-Webster definition)<sup>3</sup>. No patentable weight was or can be given to claiming "trade/ing state(s)". The examiner can give patentable weight to steps, properly recited, within a system claim, e.g., "wherein said trade sequences comprise: detecting the aggressor participant's hit or lift of an order to change from a first size to a second size that is greater than the first size, within a predefined period of time of the hit or lift command; and automatically enabling the aggressor participant to decline, prior to execution, at least a portion of only the excess above the first size."
15. Also because they add no structural limitations, no patentable weight was given to claims 2-5, 7, 14, 15, 35 and 36.
16. McCausland and Kramer also each teach:

(claims 8) a bid side and an offer side or a market (McCausland, col 18, lines 49-57 and col 20, lines 25-26; Kramer, Figure 3a and col 12, lines 10-12);

(claim 9) displaying information as to the size of uncleared (unreconciled) bids and offers (McCausland, col 18, lines 49-57; Kramer I col 12, lines 43-46);

(claims 10-12) a list (queue) of bids and offers showing the participants, time and size of entry, and price (McCausland, Figures 6-9 and col 18, line 34 - col 22, line 38; Kramer, Figure 3a; col 12, lines 3-13; and col 20, lines 43-65);

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(claim 13) displaying information regarding the hits or lifts by the participant (McCausland, col 20, lines 25-26; Kramer, Figure 3a and col 12, lines 10-12); and

(claim 34) automatically executing the outstanding order ("for a first size") in response to a hit or lift command (McCausland, col 22 line 64 to col. 23 line 2; Kramer, col 2 lines 29-42).

17. Claims 16-23 are rejected under 35 U.S.C. 102(b) as being separately anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being separately obvious over McCausland et al. (US005243331A, hereafter "McCausland") and Kramer (US patent 5,038,284).

18. McCausland and Kramer each teach (independent claim 16) a computer trading system, comprising:

a data processor with associated data storage (McCausland, col 5, lines 46-53; Kramer, abstract);

a trade command input means including said custom designed keypad wherein said keypad includes a plurality of trade execute keys, individually assigned to a particular security available for trading, said keypad further comprises a plurality of participant entry keys assigning trade commands to a particular participant (McCausland, Figure 3 and col 6, line 42 - col 8, line 23; Kramer, Figure 3a and col 16, table); and

a display means (McCausland, col 24, lines 2-5; Kramer, Figure 3a and col 11, lines 9-12).

19. While both references explicitly disclose that the keyboard contains a plurality of trade execute keys (at least one buy key and at least one sell key), it is not explicitly disclosed that the keyboard has a separate buy key and a separate sell key (i.e. a set of trade execute keys) assigned to each of a plurality of specific securities. However, Kramer discloses using special function keys on the keyboard to provide simplified data entry and further discloses altering these function keys to provide the desired functionality (col 3, line 63 - col 4, line 4). McCausland also discloses a special purpose keypad with a variety of special functions assigned to the function keys. While one exemplary mapping is disclosed, it is also disclosed that "other

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<sup>3</sup> The claim language also acknowledges, "wherein said trade state comprises a state".

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mappings of keypad 200 are possible and are contemplated" (col 6, line 40 - col 8, line 23). Thus, both references disclose that the keys on the keyboard/keypad may be altered to provide the desired functionality. The Examiner also notes that it is common for data processing keyboards to have 10-12 programmable function keys. Therefore, it is inherent that each of the programmable keys may be programmed as separate buy and sell keys for specific securities; or, at least, it would have been obvious to one having ordinary skill in the art at the time the invention was made that a plurality of buy and sell keys could be set up, one pair for each desired security. One would have been motivated to set up special buy and sell keys for specific securities in order to increase the speed in which the operator could enter selections as discussed as being desirous by both references.

20. Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure (MPEP § 2111.04). Accordingly, no patentable weight was given to the following claim language:

"for providing a trading protocol that establishes trading hierarchy among participants";

"for presenting a trading information profile wherein said trading profile includes pending offers and bids at select price points and size."

21. McCausland and Kramer also each teach (claim 17) a Cancel key (McCausland, "reject" col 7, lines 43-47 and col 23, lines 27-29; Kramer, "NT" in the col 16 table).
22. Because they add no structural limitations, no patentable weight was given to claims 18-23.

### ***Conclusion***

23. While the examiner cannot judge the patentability of claims not filed, the examiner does believe that the application contains enough detailed material to make allowance a possibility if the material is properly claimed. To expedite prosecution, **the applicant and his learned attorney are invited to bring proposed amended claims to an interview before formally filing a response** to this Office action.
24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L Champagne whose telephone number is



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571-272-6717. The examiner can normally be reached on Monday to Wednesday and Friday. The examiner can also be contacted by e-mail at [donald.champagne@uspto.gov](mailto:donald.champagne@uspto.gov), and *informal* fax communications (i.e., communications not to be made of record) may be sent directly to the examiner at 571-273-6717.

25. The examiner's supervisor, Robert Weinhardt, can be reached on 571-272-6633. The fax phone number for all *formal* fax communications is 571-273-8300.

26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6 December 2009

/Donald L. Champagne/  
Primary Examiner, Art Unit 3688